

### **REMARKS**

As indicated in the remarks submitted in the Reply dated March 9, 2007, each of the rejections in this case should be withdrawn.

#### **The Rejection Over Fitzgerald**

The Examiner rejected Claims 19-33 under 35 U.S.C. 102(b) as anticipated by Fitzgerald (US 6,746,998). This rejection is again respectfully traversed.

The Fitzgerald patent issued June 8, 2004 and the related Fitzgerald application published November 27, 2003. The instant application is a divisional application of an application filed on June 7, 2002, now US 6,699,829, (and the instant claims are of the same scope as those of US 6,699,829). Accordingly, Fitzgerald patent postdates the priority date of the present application and Fitzgerald patent is therefore not prior art under 35 U.S.C. 102(b). This rejection cannot be properly maintained and withdrawal thereof is respectfully requested.

#### **Fitzgerald Generally**

The Fitzgerald patent is also not prior art to the present application under 35 U.S.C. 102(e). The Applicants previously submitted a Declaration under Rule 131 by Kyle Doyel, one of the inventors. In his Declaration, Mr. Doyel indicates that he conceived the invention at least as early as May 23, 2002. He submitted a disclosure of the invention to Herbert I. Cantor of the firm of Crowell & Moring LLP on May 23, 2002. A copy of the disclosure is attached to the Declaration as Exhibit 1. The parent application was filed on June 7, 2002, 15 days after submitting the disclosure to Mr. Cantor. That short period of time is, *per se*, evidence of diligence.

In the Advisory Action dated March 29, 2007, the Examiner raises a concern about blank pages in the affidavit, in particular pages 55 and 67. As explained above, Exhibit 1 to the declaration is a copy of the disclosure that the inventors submitted to Herb Cantor of the firm of Crowell & Moring LLP on May 23, 2002. Each of the pages in the copy of the disclosure is numbered, including two pages, numbered 51 and 63, which have no other text on them. The page numbered 55 clearly has text on it. There is no page numbered 67. This is the way that Mr. Doyel provided the disclosure to Herb Cantor and in the interests of complete and candid disclosure, Exhibit 1 to the recently-submitted declaration is a copy of the document as originally received by Herb Cantor on May 23, 2002. In any event, reviewing that document, it is readily apparent that no text is missing. Page 51 ends with the end of claim 16 and page 53 begins with claim 17. Page 62 ends with the end of claim 30 and page 64 begins with the abstract. Moreover, regardless of whether there is any missing text or blank pages, Exhibit 1 and the declaration show that Mr. Doyel conceived the invention at least before the May 23, 2002 filing date of the Fitzgerald patent application. Accordingly, the Fitzgerald patent is not prior art under 35 U.S.C. 102(e).

#### The Rejection Over Flynn

The Examiner rejected Claims 19-33 under 35 U.S.C. 102(b) as anticipated by Flynn (US 5,814,595). According to the Examiner Flynn teaches cleaning a solid substrate with a composition as defined in Flynn's Claim 8, the composition consists essentially of (a) perfluorobutyl ethyl ether and (b) an organic solvent, the solvent being trans-1,2-dichloroethylene. When boiled, the azeotrope consists essentially of about 37 weight percent of the ether and about 63 percent of the trans-1,2-dichloroethylene. The Examiner also characterized Flynn's

teaching of solvents as teaching a number of cosolvents, including alcohols, ethers, etc.

As indicated in the previously submitted reply, this rejection is respectfully traversed.

#### The Instantly Claimed Invention

In its broadest aspect, as defined in Claim 19, the instant invention is a method of cleaning a solid surface by treating that surface with a composition comprising:

(1) greater than about 50 weight percent of a dichloroethylene (one of which could be trans-1,2-dichloroethylene);

(2) one or more alkoxy-substituted perfluoro compounds containing six carbon atoms (one of which could be perfluorobutyl ethyl ether); and

(3) an additive selected from the group consisting of:

(a) a highly fluorinated compound of the formula  $\text{CaFbHcXd}$ , where a, b, c, X, and d are as defined in Claim 19, and combinations thereof;

(b) an enhancement agent selected from the group consisting of alcohols, esters, ethers, ketones, alkanes, aromatics, amines siloxanes, terpenes, etc. and mixtures thereof; and

(c) mixtures thereof.

Thus, the composition used in the claimed method is at least a ternary composition which must have the three enumerated ingredients, for instance, the trans-1,2-dichloroethylene, the perfluoro compound, and the enhancement agent.

#### Flynn Does Not Anticipate the Instant Claims

On the other hand, Flynn teaches a binary composition having two ingredients, namely, perfluorobutyl ethyl ether and a solvent. As shown in Flynn's Claim 8, the solvent could be trans-1,2-dichloroethylene. This is

discussed on page 8, at paragraph [0015] of the instant application where it is mentioned that US 5,814,595 (Flynn) and other patents

describe a number of binary azeotrope-like mixtures with two isomers of the perfluorobutyl ethyl ether. All binary combinations are shown to be flammable with the exception of azeotropes with the following halogenated solvents: hexafluoro-2-propanol, 1,2-dichloropropane and trans DCE. The combination with trans DCE is the most interesting aspect of this patent because the material forms an azeotrope-like product at 62.7 to 68.8 wt% trans DCE depending on the HFE-7200 isomer mixture.

At Column 1, line 66 - Column 2, line 23, Flynn broadly described the composition as *consisting essentially of* the hydrofluorocarbon ether and the solvent. The solvent could be an alcohol, ether, ester, etc. At Column 3, lines 30-38, Flynn mentions "1,2-trans-dichloroethylene", apparently as a solvent. This is clarified at Column 5, lines 45-63, where trans-1,2-dichloroethylene (line 58) is included in a list of solvents.

There are two specific examples using perfluorobutyl ethyl ether ("ether A") and trans-1,2-dichloroethylene. These are Examples 27 (see Table 2) and 109 (see Table 4). Both include a major proportion of trans-1,2-dichloroethylene, and both are binary.

So, what Flynn teaches is a composition *consisting essentially of* perfluorobutyl ethyl ether and trans-1,2-dichloroethylene and no other major component. The instantly claimed invention, however, is a ternary composition which includes (1) a dichloroethylene which could be trans-1,2-dichloroethylene, (2) an alkoxy-substituted perfluoro compounds containing six carbon atoms which could be perfluorobutyl ethyl ether, and (3) an additive which is either a

highly fluorinated compound as defined in Claim 19 or an enhancement agent as defined in Claim 19.

Consequently, it is clear that Flynn does not anticipate the instant claims. The rejection should, therefore, be withdrawn.

Since all the claims are clearly in condition for allowance and distinguish over the prior art of record, whether taken singly or in combination, an early Notice of Allowance is in order and the same is most earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket No. 056276.51245DV).

Respectfully submitted,

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/Christopher T. McWhinney/  
Herbert I. Cantor  
Registration No. 24,392

Christopher T. McWhinney  
Registration No. 42,875

CROWELL & MORING LLP  
Intellectual Property Group  
P.O. Box 14300  
Washington, DC 20044-4300  
Telephone No.: (202) 624-2500  
Facsimile No.: (202) 628-8844  
HIC:CTM:mdm (2992009)